

Perceptions of Saudi Students towards Electronic and Traditional Writing Groups

Fahad Alqurashi¹

Abstract

This paper reports the findings of an experiment that investigated the reactions of Saudi college students to collaborative learning techniques introduced in two modalities: face-to-face and web-based learning. Quantitative data were collected with a questionnaire that examined the changes of three constructs: attitudes toward collaboration, social self-efficacy, and perceived peer academic support. Students' responses to the questionnaire did not show any significant differences between the experimental group and control group with respect to the three variables. Three factors might have led to such results: inadequate questionnaire procedure implementation, the novelty factor, and technical obstacles experienced during the experiment. Such positive attitudes reflect the need to update composition teaching methods, foster group work strategies, and develop more computer resources and networking facilities.

1. Introduction

Saudi college students have serious problems in learning English as a foreign language. Currently used instructional methods endorse individualistic and competitive learning activities. Collaborative methods where students work together to achieve mutual goals are widely ignored in Saudi schools. The focus of the present research was to evaluate the introduction of collaborative learning to composition classrooms in Saudi Arabia.

Saudi college students have cultural constraints against group work and free expression of thoughts and feelings. Loyalty to ethnic groups is the norm that dominates the culture. The mentality of the Saudi people does not encourage them to cooperate with people from other ethnic groups. Differences in cultural standards and social norms are maximized, which does not allow students to have positive attitudes towards each other. Regional and tribal standards and norms are very much valued, while norms and standards of other ethnic groups are typically looked down upon (Pryce-Jones, 1989).

Such cultural constraints represent serious obstacles for the application of collaborative learning. Some studies suggested that the use of technology in classrooms has the potential of softening these cultural differences. The design of the current study was based on introducing two modes of collaborative learning to

¹ Director, English Language Center, Umm Al-Qura University, Makkah, Saudi Arabia.
Email: fmqurashi@uqu.edu.sa

a Saudi context: traditional and web-based. Comparing and contrasting three constructs related to collaboration were the focus of the experiment. These constructs were attitudes to collaboration, social self-efficacy, and perceived peer academic support. The study measured the differences in students' reaction to the three constructs as a result of introducing traditional in-class collaboration and web-based collaboration.

The study was significant in a number of ways. First of all, it introduced a teaching method that goes against the prevailing cultural norms, namely, it introduces collaborative learning to a non-collaborative culture. There is a widespread agreement among educators that the use of individualistic and competitive methods in Saudi Arabia has failed for decades to give positive results. Such teaching methods did not help to decrease the cultural gap or contribute to mutual understanding among students. There is a need to seek new teaching methods to increase mutual appreciation and improve the learners' outcomes. Studies within the sociocultural approach contend that the mechanism of collaborative learning has multiple social and academic benefits. When students work together they interact with each other, have fun, and learn. The mix of fun and learning can decrease the cognitive load of learning which is a heavy burden on students (Bonk & Cunningham, 1998).

In addition, this experiment introduced web-based teaching to students from a country in the third world. Even though Saudi Arabia is a prosperous country, it is considered a 'less-developed country.' Using computers in teaching college students in Saudi Arabia is a good step toward improving instructional methods and reengineering higher education. Working to spread the culture of technology was expected to have a positive effect in introducing new values of democracy and plurality. Even though there have been several studies involving the use of computers in Saudi colleges, the current study was unique in that it was the first study of its kind that introduced different modes of collaborative learning, traditional and web-based, to students at Umm Al-Qura University in the City of Makkah, Saudi Arabia. Results of the study should help make recommendations to improve instructional methods in Saudi classrooms.

2. Background

2.1. Collaborative learning:

Collaboration in learning has gained increasing importance due to a theoretical shift in focus from cognitive factors to social factors related to the learning process. Learning is now seen more as a social process

acquired through concrete social interaction and active involvement in collective activities with others that guide and shape the learners' acquisition of skills (Althaser & Matuga, 1998). This theoretical shift has paved the way to a parallel pedagogical shift in instructional methods in different fields in which collaborative learning techniques have become the norm for many classroom activities. Group work, indeed, has academic and social advantages. Collaborative activities facilitate discussion and interaction and make it possible for the students to accept others' opinions and understand their perspectives (Bonk & Cunningham, 1998).

Any learning situation involves social interaction, collaboration, and guidance. Learning is a social process in the sense that individuals learn and develop their cognitive abilities through interaction with other people in the environment (Ewing et al., 1998). Learning occurs when learners are challenged through exposure to new experiences beyond their knowledge. Collaboration with others helps learners gradually to absorb the new experiences (Murphy, 1997). Collaborative learning constitutes a good environment for students to provide academic and social support to their peers. The more the students engage in collaborative activities, the more they care about their fellow students and wish to facilitate their learning (Romney, 2000).

2.2. Peer response

Peer response strategies utilized in composition classrooms are collaborative learning situations that have enriched the teaching of writing in different ways. Peer response groups facilitated writing teaching as a process by allowing students to work on their compositions several times rather than submitting a single draft that they think is sufficient. Having students work together in composition classrooms allowed for the expansion of the concept of audience through which students considered not only their teacher's opinion but also their peers' opinions. When engaged in peer response activities, students have the opportunity to help each other in a way that was not possible if individualistic learning techniques are followed (Levine et al., 2002).

2.3. Computers in ESL/EFL composition

There are many studies that have utilized computers in ESL/EFL composition classrooms and found multiple benefits to incorporating computers into composition teaching. Beauvois and Eledge (1996) found that non-native speakers who study composition on a local area network (LAN) perceived their electronic communication as beneficial linguistically, affectively, and interpersonally. The two researchers contend that putting students in an environment where they can communicate via computers makes students pay more

attention to class discussion, interact more actively, and respond to each other more positively. Furthermore, Sullivan and Pratt (1996) found that students in computer-assisted composition classrooms tend to participate more actively in discussion than students in traditional classrooms and that the teacher is less dominating and less authoritative in computer-mediated discussion than in oral discussion. The current study was designed to test the following three hypotheses:

1. Students who are engaged in electronic small group peer review should have more positive attitudes toward collaboration than students who are engaged in non- electronic (face-to-face) small group peer review.
2. Students who are engaged in electronic small group peer review should have higher social self-efficacy than students who are engaged in non- electronic (face-to-face) small group peer review.
3. Students who are engaged in electronic small group peer review should have greater perceived peer academic support than students who are engaged in non- electronic (face-to-face) small group peer review.

3. Methodology

3.1. Procedures

The study was conducted in the form of a semester-long experiment to examine the changes of three constructs that comprise the dependent variables of the study: attitudes toward collaboration, social self-efficacy, and perceived peer academic support of Saudi composition students. Collaborative work was the educational strategy followed during the whole experiment. Throughout the semester students were put in groups of three. They were required to look at each other's work and comment on one another's writing. Class discussion was conducted in two modes: face-to-face for the control group and web-based for the experimental group. The two modalities of collaboration comprised the independent variables of the research.

3.2. Subjects

The population of the study consisted of 50 Saudi college students. They were sophomore students whose major is English. The experiment involved two sections of a course that is part of the English language BA program at Umm Al-Qura University. Each section had 25 students. All the subjects were male since education in Saudi Arabia is gender-segregated.

3.3. Instrument

This study depended on the collection of quantitative data in order to obtain as complete a picture of the participants as possible. Quantitative data were collected through a questionnaire that was administered in the form of a pre-course test and a post-course test. All items on the questionnaire were in a Likert-scale format with four response options: Strongly agree, Agree, Disagree, Strongly disagree. The questionnaire had three scales to measure the three constructs: attitudes toward collaboration, social self-efficacy, and perceived peer academic support. The scales were adopted from three different studies that utilized those scales and obtained significant results. Items 1-9 on the questionnaire measured students' attitudes toward collaborative work.

These items were taken from Gousseva-Goodwin (2000). The nine items are:

1. Studying with a group usually helps me get better grades on tests.
2. The feedback on my work I get from peers is usually helpful
3. Working on a group project is usually not worth the time and effort.
4. In a group, usually one person ends up doing most of the work.
5. Feedback from my peers is not as useful as feedback from the instructor.
6. Group members should not be given the same grade on a project.
7. Working in groups is a good way to gain different perspectives on an issue.
8. It is very hard to distribute the workload fairly in a group project.
9. I wouldn't hesitate to complain to the instructor if a member of my group was not contributing his fair share to a project.

Items 10-17 measure the students' social self-efficacy. These items were taken from Patrick, Hicks and Ryan (1997). The eight items are:

1. I find it easy to start a conversation with most students in my class.
2. I often do not know what to say when other students in my group talk to me.
3. I can explain my point of view to other students in my group.
4. I often say things to other students that later I wish I had not.
5. I can get along with most of the students in my group.
6. When other students are already doing something together I often find it hard to join in with them.
7. I can work well with other students in my group.
8. When I have an argument with a classmate I find it hard to make up with him.

Items 18-21 measured perceived peer academic support. This is a classroom life instrument developed by Johnson, Johnson, and Anderson (1983). The four items on this scale are:

1. Students in my group want me to do my best schoolwork.
2. Students in my group like to help me learn.
3. Students in my group care about how much I learn.
4. Students in my group want me to come to class everyday.

3.4. Instructional context

The classes met twice a week: once for a 100-minute lesson and once for a 50-minute lesson. The book used was *Writers at work: A Guide for Basic Writers*. It is a high-beginning/low-intermediate writing textbook. The focus of the book is on introducing the right steps to write through implementing a peer response methodology where group work is emphasized.

3.5. Differences in treatment

The study had a quasi-random experimental design that involved two intact groups. Class activities in both groups focused on dividing students into small groups of three students each. Members in each peer response group worked together in different stages of the composing process and critiqued each other's assignments. Students in the two groups had the same syllabus and class requirements. Students were assigned to new peer response groups in each class in order to offer the opportunity for students to collaborate with different peers each time.

The modality of collaboration was what distinguished the activities of the two groups. The control group met in a classroom. Students in this group reviewed each other's assignments face-to-face. They were asked to print out their assignments and do paper and pencil peer critique. Students in the experimental group discussed issues and topics online using Blackboard, a web-based program. Student discussion was through the 'chat' feature in Blackboard. It is a same-time computer-mediated discussion feature that resembles face-to-face discussion. The difference in modality of collaboration was expected to have an effect on how students would react to group work.

4. Quantitative data

4.1. Item analysis

Quantitative data obtained from students' responses to the questionnaire items were analyzed using the Statistical Package for Social Sciences (SPSS) version 11.0 for Windows. Three types of analysis were conducted. The first analysis estimated the consistency reliability of each scale used in the study by calculating coefficient alpha. Then the researcher conducted tests of mean difference between the experimental and the control groups by a series Group (Experimental – Control) x Time (2, Pre-course test – Post-course test) analysis of variance, with repeated measures on the later factor.

4.2. Instrument reliability

Estimating the reliability of the scales was important in order to know if they are good and useful to measure the variables of the study or not. Internal consistency reliability was estimated through the calculation of Cronbach alpha which is a coefficient of reliability that assesses how well a set of items measures a single unidimensional latent construct (Brown, 2005). The internal consistency reliability of the three scales used in the pre-course test varied a lot. Attitudes to collaboration scale had low reliability ($\alpha = .22$). The social self-efficacy scale was more reliable ($\alpha = .62$) while the perceived peer academic support scale had even higher reliability ($\alpha = .70$). The same scales used for the post-course test scored higher reliability. Attitudes to collaboration scale scored ($\alpha = .35$). The social self-efficacy scale scored ($\alpha = .62$) and the perceived peer academic support scale had high reliability ($\alpha = .85$).

4.3. Test of means

4.3.1. Attitudes to Collaboration

Table 1 shows the attitudes scores for students in the experimental group and control group at the beginning of the semester and at the end of the semester. In a 2x2 repeated measures ANOVA (group x time), no main effects were found for group or time. No interaction was found either. This would indicate that the attitudes in the experimental and control conditions were not statistically different from each other at pre-course and post-course tests. Consequently, the first hypothesis was not supported. Students in the experimental group who had electronic collaborative learning strategies in the Blackboard environment did not have more positive attitudes to collaboration than students in the control group.

Table 1: Means and standard deviations for attitudes to collaboration

	Experimental		Control	
Attitudes to Collaboration	Pre-course	Post-course	Pre-course	Post-course
Mean	14.6	14.1	13.6	14.0
Standard deviation	2.04	1.94	2.67	2.54

4.3.2. Social self-efficacy

Table 2 reveals how students in the experimental group and the control group felt about their level of social self-efficacy. No main effects were found for group or time in a 2x2 repeated measures ANOVA (group x

time). No interaction was found either. This would indicate that the pre-course and post-course tests results did not have any statistically significant differences with respect to the level of students' social self-efficacy. Accordingly, the second hypothesis was not supported either. Students in the experimental group who used electronic peer review in the Blackboard environment did not have higher levels of social self-efficacy than students in the control group who peer reviewed each other face-to-face.

Table 2: Means and standard deviations for significant effects

	Experimental		Control	
Social self-efficacy	Pre-course	Post-course	Pre-course	Post-course
Mean	24.6	24.5	22.8	24.0
Standard deviation	2.95	3.44	3.51	2.70

4.3.3. Perceived Peer Academic Support

Table 3 shows the perceived peer academic support scores for students in the experimental and control groups at the beginning and end of the semester. In a 2x2 repeated measures ANOVA, a main effect was found for time ($F_{1,48} = 5.80, p = .02$). No effect was found for group nor for the interaction of group by time. The time differences showed that overall pre-course mean (11.28) dropped at the post-course measure (10.50). Because there was not an interaction, this would indicate that both the experimental and control groups showed similar rates of decline. For this reason, the third hypothesis was not supported. The experimental group students who studied with online collaborative strategies did not have greater perceived peer academic support than students in the control group who studied with in-class collaborative strategies.

Table 3: Means and standard deviations for significant effects

	Experimental		Control	
P Peer Academic Support	Pre-course	Post-course	Pre-course	Post-course
Mean	11.4	10.2	11.1	10.7
Standard deviation	2.08	2.50	2.18	2.74

6. Discussion

Students' responses did not support any of the three hypotheses. That means the online collaborative activities that students in the experimental groups conducted failed to make their feelings towards group work more

positive than those of the control group students who had only in-class collaborative activities. Likewise, electronic peer review did not increase the social efficacy of the students in the experimental group over students in the control group who peer reviewed each other face-to-face. In addition, students in the experimental group, who used the online Blackboard environment to comment on each other's entries, did not have greater perceived peer academic support from their peers than students in the control group who commented on each other's drafts in class.

Since the three hypotheses were not supported by the empirical evidence, the next step was to investigate the causes of such failure by taking into account the particulars of the educational situation of the experiment, the social setting of the subjects, and the surrounding cultural factors. Primarily, there were three factors that might have led to these results: a procedural implementation problem, the novelty of the introduced instructional method, and the technical complications encountered during the experiment.

6.1. Source of random error in the measure

The first scale that measured the students' attitudes toward collaboration had low reliability. Subjects of the study could have responded randomly to the questionnaire because they were inattentive to the test, the format of the test may have not been clear to them, the scale items could have contradicted some of their cultural expectations. In response to the first scale's low reliability, some of the items in this scale had to be left out in order to bring the test reliability up to produce a better scale. The items trimmed were the ones that performed the least well. After those items had been excluded, the internal consistency Cronbach Alpha went up to ($\alpha = .46$) in the pre-course test and to ($\alpha = .31$) in the post-course test. Such improvement in reliability level was vital for this scale in order to provide some statistical significance to the findings. Even though this improvement was not very high, it made the reliability level acceptable.

Data obtained from the first scale, in spite of the fact that the scale had low reliability, were useful in measuring the students' attitudes toward collaboration. The magnitude of alpha still makes possible the demonstration of validity because the scale had other properties of interest like factoral distinctness and content coverage. "When a measure has other desirable properties, such as meaningful content coverage of some domain and reasonable unidimensionality, this low reliability may not be a major impediment to its use" (Schmitt & Pratt, 1996: 351-352).

6.2. Novelty factor

The prevailing instructional methods in higher education settings in Saudi Arabia follow individualistic and competitive styles. Collaborative learning techniques are not integrated into classroom practices. Students are encouraged to compete to give “the best answer.” There are no group projects in which students work together. This situation creates a barrier against introducing collaborative learning strategies to Saudi students. At the beginning of the experiment, the participants were reluctant to engage in group work and hesitant to sit with other students that they do not know to form a group. They wanted to be in a group with students that they knew already.

As a reaction to group work, students might have thought that they had to agree on all issues when they engage in collaborative tasks. Throughout the experiment, the teacher did not require the subjects to agree on everything they discussed. However, the novelty of the teaching method could have given them a sense of the necessity of group consensus. Students may have felt that the feedback they got from peers had to be incorporated in the next draft. Previous research observed that seeking consensus is one of the prominent dangers to collaborative learning because it threatens the voicing of opinion by eliminating or concealing diversity. Such diversity, or even conflict, of opinions should not be ignored because it is a mere reflection of the societal and cultural situation outside the classroom (Myers, 1986).

Furthermore, students in the experiment were not comfortable with submitting multiple drafts of a single essay because they were not asked to do the same thing in most of the writing classes they took before. They were used to writing a single adequate draft to be evaluated by the teacher. They were not comfortable with situations where they were observed by more than just the classroom teacher. As a result, introducing writing as a primarily social activity and asking students to submit multiple drafts of a single essay could have been a crucial factor that contributed to the results of the study.

6.3. Technical obstacles

Introducing computer-based activities to the subjects could have represented another challenge to students similar to the challenge that group work represented. Students in both groups were required to use computers. All students typed their compositions and made copies for their peers to review. In addition, students in the experimental group peer-reviewed each other’s work using the Blackboard web-based environment. Using

computers to turn in compositions and utilizing web-based chat might have been one of the factors that affected their answers to the questionnaire items because the use of computers in teaching English as a foreign language in Saudi Arabia is limited.

Al-Kahtani (2001) studied how Computer Assisted Language Learning is used in teaching English as a foreign language in four Saudi universities. He found that CALL is not fully integrated into EFL programs. CALL is not used at all in some EFL programs. In some other programs, the use of CALL is minimal and superficial. The only computer application used at these universities is word processing. In addition, only 33% of the 91 instructors who completed the questionnaire in that study had access to a computer in their departments which means that the departmental computer access was not widespread among EFL faculty at the four Saudi universities. Only 20% had access to the Internet through departmental computers, which indicates the insufficient level of networking facilities available in Saudi universities.

Such limited computer facilities affected using the Internet as a web resource, which consequently could have been a major factor in why students in the experimental group did not feel good about web-based learning. In the first week of school the researcher could not access the Blackboard account because the Internet system at Umm Al- Qura University isolates the campus and depends on a local area network. The only way to access the Internet was through a Proxy given to registered users. Even though the researcher needed full access to the Internet in order to use the online Blackboard version, computer services could not do that because the connection bandwidth for the whole university was only 1 megabit. Thus, giving the researcher full access to the Internet would affect the Internet service for the whole campus.

Web-based instruction in Saudi Arabia currently experiences a multitude of difficulties. Teachers and students cannot gain full access to the Internet, which makes it hard to take advantage of all the benefits of the Internet as a learning and teaching resource. Saudi Arabia, unlike most countries in the world, has imposed restrictions on Internet use. There is a centralized blocking system that enables the government to block any undesired sites. All online traffic to and from the country has to go through a central control center where materials are filtered (Hamilton, 2002).

7. Summary

The aim of the present research was to investigate how Saudi college students would respond to collaborative learning techniques introduced in two modalities: face-to-face and web-based. Students in both groups responded to the same questionnaire in a pre-course test and a post-course test. Students' scores did not show any significant differences between the experimental group and control group with respect to the three variables examined: attitudes toward collaboration, social self-efficacy, and perceived peer academic support.

There are three factors that might have contributed to not supporting the three hypotheses. First, the scale that measured the subjects' attitudes toward collaboration had a low level of reliability which marks a problem in the procedural implementation. Second, introducing collaborative learning techniques to Saudi students contradicted the individualistic and competitive styles they had acquired since elementary school. Third, the technical complications experienced during the experiment could have been a discouraging factor for the subjects. There were not enough computer labs for students to use and the networking services were not reliable.

Recommendations:

Based on the results of this study, the following recommendations are made:

1. Updating teaching methods by taking advantage of the process-oriented approach to increase and develop the students' writing skills.
2. As a new instructional technique, peer response groups should be introduced carefully to students.
3. Updating computer resources to enhance and improve the quality of teaching English as a foreign language.
4. Improving Internet services is essential and this includes increasing access to the Internet, supporting web-based applications, improving productivity, and reducing costs.
5. Enhancing technical support ensure providing quality computer services.

References

- Al-Kahtani, S. (2001). Computer-assisted language learning in EFL instruction at selected Saudi Arabian universities: Profiles of faculty. Unpublished PhD dissertation. Indiana University of Pennsylvania.
- Althausen, R., & Matuga, J. M. (1998). On the Pedagogy of Electronic Instruction. In C. J. Bonk & K. S. King (Eds.), *Electronic collaborators: Learner-centered technologies for literacy, apprenticeship, and discourse* (pp. 183-208). Mahwah, NJ: Erlbaum.
- Beauvois, M. H., & Eledge, J. (1996). Personality types and megabytes: Student attitudes toward computer mediated communication (CMC) in the language classroom. *CALICO Journal*, 13, 27-45.
- Bonk, C. J. & Cunningham, D. J. (1998). Searching for learner-centered, constructivist, and sociocultural components of collaborative educational learning tools. In C. J. Bonk & K. S. King (Eds.), *Electronic collaborators: Learning-centered technologies for literacy, apprenticeship, and discourse* (pp. 25-50). Mahwah, NJ: Lawrence Erlbaum Associates.
- Brown, G. (2005). External factors forcing change on education: How can they work for us? Retrieved June 8, 2005, from: <http://www.inform.umd.edu/UMS+State/UMD-Projects/MCTP/Essays/ExternalForces.txt>
- Ewing, J. M., Dowling, J. D., & Coutts, N. (1998). Learning using the world wide web: A collaborative learning event. *Journal of Educational Multimedia and Hypermedia*, 8, 3-22.
- Gousseva-Goodwin, J. V. (2000). Collaborative writing assignments and on-line discussions in an advanced ESL composition class. Unpublished PhD dissertation. University of Arizona.
- Hamilton, S. (2002). Internet accessible information and censorship, intellectual freedom and libraries -a global overview. *IFLA Journal*, 28, 190-197.
- Hofstede, G. (1984) Culture's Consequences. London: Sage.
- Johnson, D. W., Johnson, R. T., & Anderson, D. (1983). Social interdependence and classroom climate. *Journal of Psychology*, 114, 135-142.
- Levine, A., Oded, B., Connor, U., & Asons, I. (2002). Variation in EFL-ESL Peer Response. *TESL-EJ*, 6. Retrieved June 8, 2005, from: <http://www-writing.berkeley.edu/TESL-EJ/ej23/a1.html>
- Murphy, E. (1997). *Characteristics of constructivist learning & teaching*. Retrieved June 8, 2005, from: <http://www.cdli.ca/~elmurphy/emurphy/cle3.html>
- Myers, G. (1986). Reality, Consensus, and reform in the rhetoric of composition teaching. *College English*, 48, 154-74.
- Patrick, H., Hicks, L., & Ryan, A. M. (1997). Relations of perceived social efficacy and social goal pursuit to self-efficacy for academic work. *Journal of Early Adolescence*, 17, 109-128.
- Pryce-Jones, D. (1989). *The closed circle: an interpretation of the Arabs*. New York: Harper & Row Publishers.
- Romney, C. (2000). An Introduction to Collaborative Learning. *Teaching and Learning News*, 1. Retrieved July 2, 2005, from: <http://www.uwinnipeg.ca/academic/citl/news19.html>
- Sullivan, N., & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System*, 29, 491-501.